

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**Docket Number (Optional)  
IN-5597

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Application Number  
10/789,764Filed  
02/27/2004On N/A Pre-Appeal Brief is being e-filedFirst Named Inventor  
John E. Boisseau

Signature \_\_\_\_\_

Art Unit  
1797Examiner  
Christine T. Mui

Typed or printed name \_\_\_\_\_

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor

Signature

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

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Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

February 28, 2008

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

\*Total of 2 forms are submitted.

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/789,764

Filing Date: February 27, 2004

Applicant: Boisseau, et al.

Group Art Unit: 1797

Examiner: Christine T. Mui

Title: TEST METHOD FOR DETERMINING ETCH PERFORMANCE  
OF A COATED SUBSTRATE

Attorney Docket: IN-5597 (HDP 0906S-000446/US)

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Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

Applicants respectfully request review of the final Office Action mailed November 28, 2007. A Notice of Appeal accompanies this request.

Claims 1-28 are pending in this Application and stand finally rejected.

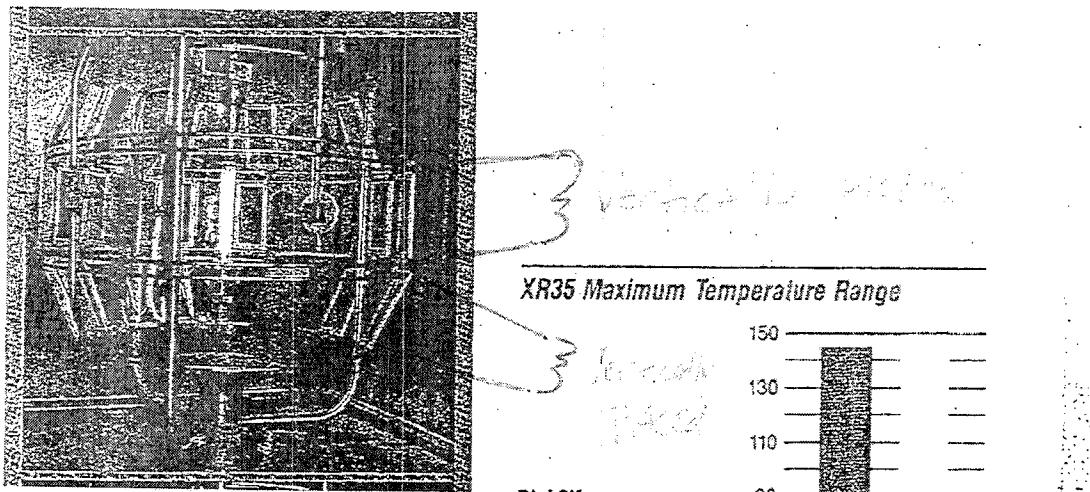
## ARGUMENT

Claims 1-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Atlas Electric Devices Co. (submitted on the Information Disclosure Statement on 29 March 2004, herein referred “Atlas”), and further in view of Palm et al. (submitted on the Information Disclosure Statement on 29 March 2004, herein referred “Palm”).

1. **The combination of Atlas and Palm does not teach methods for measuring the acid etch effect of acid rain on a coated substrate which is in a substantially horizontal position of less than 15° to the horizontal.**

The combined references fail at least to teach, disclose, or suggest a method which tests a substrate in a substantially horizontal position.

Atlas does not teach testing a substrate placed substantially horizontally in the test chamber but instead appears to depict the substrate being placed vertically or slightly offset from vertical in the chamber. The Examiner’s interpretation that the Atlas dimensions of device specimen holders requires the specimens to be placed within the apparatus in a horizontal position is incorrect. The dimensions of 70x45x3 mm and 70x145x3 mm refer to the width, height, and depth, respectively, of the CD-3T and SL-3T specimen holders. Accelerated Weathering Products, “Specimen Holders” Brochure (available at <http://www.davidson.com.au/products/envirosim/Atlas/pdf/Ci-Series-Specimen-Holders.pdf>, last visited December 27, 2007, copy attached to Office Action Response mailed January 2, 2008). The varied dimensions of specimens relate to the height of the sample which facilitates different vertical placements and vertical angling of the specimen holders within the Atlas XR35 device. The vertical placement and angling is shown in the following marked-up version of an Atlas Figure at page 2:



The Examiner has not provided any reason or suggestion as to why the substrates would not be placed vertically or substantially vertically in the specimen holders provided on the Atlas XR35 device. In the Advisory Action, the Examiner states “[e]ven though the dimension of the holders are 70x45x3 and 70x145x3, depending on the size of the substrate itself, the holder may hold the substrate in a substantially horizontal position as claimed at any angle from the horizontal.” Applicants respectfully assert that the Examiner is attempting to eliminate the Atlas teachings and the design of XR35 device – which require vertical or substantially vertical placement, and instead, assert a misuse of the Atlas device against the Atlas teachings and design. However, misuse of a reference or improperly modifying a reference that would render the teachings unsuitable for the underlying purpose is not the standard for *prima facie* obviousness.

Further, Palm teaches alternating exposure angles of the substrate to include 45° and 26° angles. To the contrary, Applicants claim a method in which the substrate is substantially horizontal in a position of less than 15° to the horizontal.

One skilled in the art would not be motivated to combine the Atlas placement of the substrates in a vertical or substantially vertical position, with the Palm reference and the exposure angles of 45° and 26°. Neither of these references provides any teaching or suggestion to place the substrate in a substantially horizontal in a position of less than 15° to the horizontal.

**2. The combination of Atlas and Palm does not teach methods for testing by applying an acid solution to a substrate and subsequently exposing the substrate in varying heat and light conditions.**

Atlas does not teach or suggest testing a substrate against an acid solution to simulate the effects of acid rain or conducting an acid solution test while simultaneously delivering heat to a painted substrate. Instead, the Atlas apparatus and methods simulate temperature cycles (-40°C to 150°C), moisture, and light exposure. Page 2.

Palm discloses a testing protocol to simulate acid rain, page 69, and the Palm protocol “optimize[s] the accelerated test cycle with respect to the load of acid rain spray, as well as to temperature and irradiance,” page 70. Palm does not teach or suggest varying the temperature within the testing chamber. As indicated in “The Test Cycle” description, the dry temperature difference between the light period and the dark period was a mere 9°C. Page 72.

In contrast to the combination of Atlas and Palm, Applicants’ invention relates to methods for measuring the acid etch effect of acid rain on a coated substrate which is in a substantially horizontal position of less than 15° to the horizontal by applying an acid solution is applied to the substrate, and subsequently, the substrate is exposed to heat and light.

One skilled in the art would not be motivated to combine the Atlas technique, which only tests temperature and humidity changes, with the Palm technique for acid rain testing without the application of heat. There is no apparent reason to combine the extreme -40°C to 150°C temperature cycling taught in the Atlas with the acid solutions from Palm.

CONCLUSION

Even if the combination were to be made, the combination would not teach or suggest Applicants' claimed invention because both references have deficiencies or teach away from aspects of Applicants' claimed invention. The combination of Atlas and Palm would either result in eliminating the acidic solution from the test, eliminating the simultaneous application of heat and light from the substrate, placing the substrate in a substantially vertical position, or rotating the substrate through a series of angles greater than 15 degrees to the horizontal.

Accordingly, the combination of Palm and Atlas does not teach or suggest Applicants' claimed invention, the §103 rejection of the claims

Respectfully submitted,

Dated: February 28, 2008

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